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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,826	07/05/2001	Graham Clemie	0106US-CLEMI	5232
23521	7590	06/28/2004	EXAMINER	
SALTAMAR INNOVATIONS 30 FERN LANE SOUTH PORTLAND, ME 04106			ZHOU, TING	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,826

Applicant(s)

CLEMIE, GRAHAM

Examiner

Ting Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/22/04
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-29 and 31-45 is/are rejected.
- 7) ☒ Claim(s) 10 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 22 April 2004 have been received and entered. Claims 1-45 as amended are pending in the application.

Allowable Subject Matter

2. Claims 10 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fail to teach the limitation of the properties of the node or its information sources are selected from a list consisting of age, ownership, importance, age of node, results of a query, frequency of use, size, type, speed of link to information source and location of information source, when considered as a whole.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 11, 13-16, 19-29, 31, 33-36, and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pooser et al. U.S. Patent 5,812,134 and Robertson et al. U.S. Patent 5,295,243.

Referring to claims 1, 21 and 45, Pooser et al. teach a computer apparatus and method of controlling a graphical user interface for use in accessing and organizing information sources, as recited in column 3, lines 3-5. Specifically, the apparatus and method comprises an interface generating module (means) having a graphical output on a display (Pooser et al.: column 3, lines 9-11), the graphical output depicting a plurality of nodes (Pooser et al.: column 3, lines 19-22), a node arrangement software module responsive to information reflecting the relationship between nodes adapted for arranging nodes in a graphic representation of three dimensional space (Pooser et al.: column 4, lines 5-8), the location of nodes in three dimensional space indicating relationships therebetween (Pooser et al.: column 3, lines 17-31), wherein at least one node comprises a link to an information source, the information source being accessible by selection of link responsive to user interaction with an input device (Pooser et al.: column 4, lines 44-53 and column 7, lines 59-62). Furthermore, Pooser et al. teach the relationships between the nodes include a hierarchical relationship having a plurality of levels (Pooser et al.: column 3, lines 44-48). However, Pooser et al. fail to explicitly teach the three dimensional space being arranged with three axes including a first axis, a second, different, axis and a third, different axis wherein the first, second and third axes are orthogonal to each other and the first axis lies parallel to a plane of the display, wherein the levels are sequentially spaced along the first axis and wherein the nodes of one level are represented in arrangements which are spaced along both the second and the third axis. Robertson et al. teach a system for organizing and displaying hierarchical information in three dimensional space (Robertson et al.: column 1, lines 48-53 and Figures 1 and 2) similar to that of Pooser et al. In addition, Robertson et al. further teach the three dimensional space being arranged with three axes including a first axis, a second, different, axis

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and a third, different, axis wherein the first, second and third axes are orthogonal to each other and the first axis lies parallel to a plane of the display (three dimensional display of orthogonal axes, wherein for example, the y-axis shown in Figure 1 is parallel to the plane of the display and the x-axis shown in Figure 2 is parallel to the plane of the display) (Robertson et al.: column 5, lines 35-43 and Figures 2 and 3), wherein the levels are sequentially spaced along a first axis and the nodes of one level are represented in arrangements which are spaced along both the second and the third axis (for example, as shown in Figure 1, the hierarchical levels are sequentially spaced along the y-axis and the nodes of one level, say level 3 are arranged along both the 2nd and the 3rd axis). It would have been obvious to one of ordinary skill in the art, having the teachings of Pooser et al. and Robertson et al. before him at the time the invention was made, to modify the three dimensional navigation system of Pooser et al. to include the arrangement of nodes across three orthogonal axes, as taught by Robertson et al. One would have been motivated to make such a combination in order to provide an effective display of large complex data structures, so that the display can visually represent the global contextual information for complicated data as well as selected local aspects of the data.

Referring to claims 2 and 22, Pooser et al. teach the relationship between at least two nodes depicted by the relative positioning of the nodes (a node positioned in the higher level has a parent-child relationship with the nodes positioned in the lower levels), as recited in column 3, lines 44-48.

Referring to claims 3 and 23, Pooser et al. teach the interface generating module adapted for displaying a representation of a three dimensional space comprising nodes having three

dimensional co-ordinates associated therewith, as recited in column 4, lines 5-8 and column 27, lines 6-13. This is further shown in Figure 4.

Referring to claims 4 and 24, Pooser et al. teach maintaining a user viewpoint within the three dimensional space and calculating graphical images as if the user were located at the user viewpoint within the three dimensional space, as recited in column 3, lines 55-65 and column 4, lines 11-26.

Referring to claims 5 and 25, Pooser et al. teach a sound generation module producing a sound depending on the location in the three dimensional space relative to the user viewpoint of nodes which link to sound information sources, as recited in column 7, lines 62-66, column 8, lines 32-35 and column 10, lines 10-19.

Referring to claims 6 and 26, Pooser et al. teach at least one node comprising a link to an application and selection of the link activates the application (for example, a physician looks at patient data and selects a link to open related patient records to view), as recited in column 4, lines 40-58.

Referring to claims 7 and 27, Pooser et al. teach a user software module having a graphical user interface functionality adapted for enabling a user to perform an action selected from the list consisting of creation of a link, creation of a node, moving of a node, moving of a link, altering of a node and altering of a link (user can create, move and alter panorama, which includes both nodes and links), as recited in column 10, lines 10-19.

Referring to claims 8 and 28, Pooser et al. teach a user software module having a graphical user interface functionality adapted for specifying the relationship between nodes (the

PNS software allows user to create and change relationships between nodes in the panorama), as recited in column 9, lines 64-67 and continuing onto column 10, lines 1-19.

Referring to claims 9 and 29, Pooser et al. teach the visual or aural appearance of a node reflecting properties of the node or its information sources (the visual appearance of nodes varies as the text descriptions reflecting its properties shown on the display screen changes; nodes can also be represented by different symbols), as recited in column 8, lines 41-51.

Referring to claims 11 and 31, Pooser et al. teach the appearance of a node altered by dynamically varying the visual or aural properties, or the position of the node (as the symbol used to represent the node is dynamically customized and changed by the user, the appearance of the node on the display screen is similarly changed), as recited in column 8, lines 41-51 and column 10, lines 10-19.

Referring to claims 13 and 33, Pooser et al. teach adapting to highlight multiple instances of the same node or information source in response to selection of a node (when the user selects a node, via highlighting words/phrases, information related to the words/phrases, such as other occurrences of the words/phrases are also displayed on the screen), as recited in column 5, lines 1-14.

Referring to claims 14 and 34, Pooser et al. teach adapting to prepare a plurality of nodes from a hierarchical filing system (the nodes could comprise numerous files such as text, audio, and image files), as recited in column 8, lines 20-35 and column 10, lines 10-19.

Referring to claims 15 and 35, Pooser et al. teach adapting to automatically link information received, sent or newly created to a node (the "automatic customization"

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functionality records the information received regarding a user's node selections and saves it for future use), as recited in column 12, lines 13-22.

Referring to claims 16 and 36, Pooser et al. teach creating a new node (creating a customized path) upon receiving, sending or creating information (regarding the user's node/thread selections), as recited in column 12, lines 13-22.

Referring to claims 19 and 39, Pooser et al. teach at least one information source further comprising a link to information concerning the node (by highlighting a hypertext link, additional information regarding the link will be displayed), as recited in column 5, lines 1-14.

Referring to claims 20 and 40, Pooser et al. teach the graphical user interface functioning as a computer desktop, as recited in column 7, lines 52-62 and further shown in Figures 1 and 3a.

Referring to claims 41 and 42, Pooser et al. teach a computer program comprising program instructions (PNS software) which, when loaded into a computer, will cause it to perform the functions of the computer apparatus and carry out the GUI controlling method, as recited in column 8, lines 6-18.

Referring to claims 43 and 44, Pooser et al. teach a computer readable media comprising the computer program, as recite in column 7, lines 52-59.

4. Claims 12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pooser et al. U.S. Patent 5,812,134 and Robertson et al. U.S. Patent 5,295,243, as applied to claims 1 and 21 above, and Johnson et al. U.S. Patent 6141655.

Referring to claims 12 and 32, Pooser et al. and Robertson et al. teach all of the limitations as applied to claims 1 and 21 above. However, Pooser et al. and Robertson et al. fail

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to explicitly teach the same node or information source appearing more than once within the three dimensional space. Johnson et al. teach a hierarchical method for structuring and representing data in three dimensional space (Johnson et al.: column 2, lines 27-35 and column 4, lines 17-19) similar to that of Pooser et al. and Robertson et al. In addition, Johnson et al. further teach the same node appearing more than once within the three dimensional space (Figure 2B). It would have been obvious to one of ordinary skill in the art, having the teachings of Pooser et al., Robertson et al. and Johnson et al. before him at the time the invention was made, to modify the hierarchical method for representing information of Pooser et al. and Robertson et al. to include having the same node appearing more than once, as taught by Johnson et al. One would have been motivated to make such a combination in order to efficiently represent information, enabling data to be stored in a storage medium in a compact form and thus permitting rapid queries and aggregation of data as data size and complexity continues to grow.

5. Claims 17-18 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pooser et al. U.S. Patent 5,812,134 and Robertson et al. U.S. Patent 5,295,243, as applied to claims 1 and 21 above, and Norin U.S. Patent 5,812,773.

Referring to claims 17-18 and 37-38, while Pooser et al. and Robertson et al. teach all of the limitations as applied to the claims above, Pooser et al. and Robertson et al. fail to explicitly teach receiving, sending or creating information in the form of email messages. Norin teaches the display of hierarchically structured data similar to that of Pooser et al. and Robertson et al. In addition, Norin further teaches receiving, sending or newly creating information in the form of an email message, as recited in column 15, lines 42-44 and column 16, lines 5-9. It would have

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been obvious to one of ordinary skill in the art, having the teachings of Pooser et al., Robertson et al. and Norin et al. to modify the user interface navigational apparatus and method for representing information of Pooser et al. and Robertson et al. to include the transmission of information via messages, taught by Norin. One would have been motivated to make such a combination because it would make it easy, convenient and fast to organize and relay information.

6. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar methods of hierarchically representing information in three dimensional space.

Response to Argument

7. Applicant's arguments with respect to claims 1-45 have been considered but are moot in view of the new ground(s) of rejection.

8. The applicant requested that the Office point out the location of the word "computerising" in the Specification. Upon further review of the specification, the examiner determined that the word used was "computerised" (on the first line of paragraph 2 on page 1 of Specification) instead of "computerising". The examiner apologizes for this confusion and asks the applicant to change the use of "computerised" to --computerized-- to conform grammatically with the rest of the application.

9. The applicant particularly pointed out that while the Pooser et al. reference relates to links to data, the reference does not teach links to application, and/or activation of the application. However, Pooser et al. teach, in the various embodiments described in column 4, lines 40-67 and column 5, lines 1-51, links to various information, which can be viewed via an application. For example, in the health care field embodiment described in column 4, lines 40-53, Pooser et al. teach links to related patient records such as test results, ultrasound, etc. which can be viewed by the physician; in viewing the patient records, the physicians will be activating an application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (703) 305-0328. The examiner can normally be reached on Monday - Friday 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9 June 2004


BA HUYNH
PRIMARY EXAMINER